



## **Identification of Barriers to the Recruitment & Retention of Women Intermodal Transportation Workers**

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The Bureau of Labor Statistics reports that as of 2009, women comprised 46.8 percent of the total United States labor force. The female workforce is projected to account for 46.9 percent of the total labor force in 2018 and is expected to contribute the majority 51.2 percent of the increase in total labor growth between 2008 and 2018 (United States Department of Labor Women's Bureau). However, there are sectors of labor in which gender inequality on the account of women is still prevalent. Women comprise only 24.5 percent of the transportation industry. As of 2008, only 10.4 percent of all civil engineers in the United States were women. In transportation and modal occupations, which includes baggers and stock handlers to positions of bus driver and pilots, the percentage of full-time employed female transportation workers totaled only 13 percent in 2009 (Department of Labor Bureau). In the present year of 2011, men still greatly disproportionally hold the jobs within the transportation industry.

Within the next 15 to 20 years, the transportation industry is projected to face a staffing shortage at all levels of the industry due to an aging workforce and failure to recruit new employees at the rate of projected retirement (Sussman, 1999). Most administrators agree that there is a necessity to attract and develop highly qualified professionals in order to address these needs. Based on demographic surveys it is clear that women are underrepresented in the transportation industry and are potentially an untapped resource for future labor. For unknown reasons, women are reluctant to start or maintain a career in the transportation industry. This study was based on the notion that an in-depth exploration of their experience might enlighten industry professionals about what approaches are best for recruiting and retaining women in the transportation industry.

In addition, this study is to determine how women in the transportation industry experience the workplace and what, if any barriers they encounter in a male dominated industry. Understanding what keeps women in their current positions or what misgivings they may have

had about entering the transportation industry is will be necessary to market entry into the field to a new generation of women.

### **Review of Current Literature**

During a review of the current literature, only one research study was found that attempted to explore the gender inequality of women in the transportation industry. Hanson and Murakami (2010) recognized the gender discrepancy in the U.S. transportation sector. They realized that the gender inequality statistics within the transportation industry were of interest for two reasons: (1) the gender inequality may be best explained in terms of lack of equal opportunity for men and women within the industry and (2) women may not be attracted to the industry due to a gap in education or lack of role models. They also recognized the limited talent pool of women for the transportation industry. This phenomenon may possibly be due to the lack of recruitment of women and advertising mainly geared towards characterizing transportation jobs as non-traditional roles for women. Educating women on the roles they may have in the transportation industry could provide value to recruitment. The Women's Labor Bureau defines a job non-traditional for women if less than 25 percent of that labor force is made up of women. (Women's Labor Bureau). The transportation industry still clearly meets criteria for a non-traditional career choice for women today. Other non-traditional jobs for females have made their way into mainstream traditional such as doctors, lawyers, and scientists. Why have engineering and transportation jobs not made this transition? "Not only does this gender imbalance limit women's opportunities for interesting and well-remunerated work, it deprives the transportation field of a vital source of talent" (Hanson and Murakami, 2010).

In order to try and understand the circumstances for this gender underrepresentation, Hanson and Murakami (2010) interviewed eight women leaders in the transportation industry. The participants had all worked within the transportation industry for many years and were recommended to the researchers by the planning committee for the Transportation Research

Board conference. The interviewees were: Brenda M. Bohlke, President of Myers Bohlke Enterprise, Great Falls, VA; Marsha Anderson Bomar, AICP, President, Street Smarts, Duluth, GA; Linda Figg, President, FIGG Engineering Group, Tallahassee, FL; Carla Holmes, PTOE, Founder, Carla Holmes Engineering, Ellenwood, GA; Linea Laird, Project Manager, Washington State Dept. Of Transportation, Seattle, WA; Wendy Lopez, Vice President, URS Corporation, Dallas, TX; Kim Thatcher, Owner, KT Contracting Company, Inc., Salem, OR; and Doris Willmer, President, Willmer Engineering, Atlanta, GA.

The researchers' questioning sought to understand reasoning behind women not being attracted to the industry. Their interviews were also geared towards uncovering recommendations that leaders in the field understood and may be able to share in order to increase gender equality. Several themed recommendations by the leaders emerged. Prominent suggestions included connecting with children and young people through schools and existing programs to advertise the roles of women in science and engineering, as well as building relationships through networking within the industry to connect women and attract awareness to women looking for positions. Pay it back. Get involved at the local level in school and community programs so others can learn about what you do. Be an ambassador. Seek opportunities to represent the profession. Be visible, be accessible. Inspire someone (Hanson and Murakami, 2010).

The transportation leaders also recommended participation in industry organizations and taking leadership positions in those organizations to show the proficiency and capability of women within the transportation industry. They found that becoming a mentor to aid other women significantly helped to advance the careers of women. "Early in your career, find a mentor, whether a woman or a man. A mentor can help you learn skills to advance and help build your network" (Hanson and Murakami, 2010). Lastly, they recognized that the transportation industry needs to ensure flexibility in the workplace for female employees to accommodate family schedules and create part-time positions. Although the described study is insightful, limitations to the researchers' understanding of the female workforce development should be recognized. The researchers failed to interview both managerial and non-managerial level

women within the industry. They also did not interview women within different roles and occupations of the industry to better understand the vast array of issues. The small sample of eight high-powered female executives most likely skewed results and overlooked additional essential explanations.

No other published studies of women's perceptions or experiences within the transportation industry could be located. A large body of research was found which more broadly addressed the issue of women's lack of entry into male-dominated career fields. The two subsets of this research appear to be studies attempting to define a model of women's career development and studies that seek to understand the specific demographic factors that predict the interest in, entry, and retention of women in a variety of industries.

Various theories exist that attempt to explain gender-based differences in career development. Relationally focused theory for example predicts that women prefer career fields that they believe reflect a relationship focus. The theory holds that the importance for women of feeling trusted or supported by their organization is essential, and this may be less likely to occur in male dominated fields such as the transportation industry (Crozier 1998; Sokjer-Petersen & Thorssell, 2008). Social cognitive theory suggests that rather than relational focus, women's career development is influenced by career self-efficacy beliefs and behaviors that reflect these beliefs (Farmer, H., Wardop, J., Anderson, M., Riesinger, R., 1995). Expansionist theories suggest that workplace distress is related to underutilization of skills, perception of limited opportunities, and heavy job demands in both men and women (Barnett & Hyde, 2001; Sullivan and Mainiero, 2006). Expansionist theory explains differences in entry and retention of women in male dominated fields as a byproduct of differences in evaluation of opportunities for success in the field. It is unclear if these perceptions are accurate given the climate of the transportation industry, or if they are a result of lack of information or understanding about the opportunities available. Demographic factors have been shown to influence women's entry and persistence in male dominated career fields. Other factors include the presence of a role model (Quimby & Desantis, 2006), career self efficacy (Farmer et al., 1995), perception of barriers (Rivera et al, 2004), demographic factors (Rosen & Korabik, 1990), work life balance (Whitmarsh, et al.,

2007), and workplace factors (Crozier, et al. 1998). As no studies focusing specifically on the experience of women in the transportation industry could be located, it is unclear to what extent the various developmental theories and population variables apply to this group.

### **Method**

Phenomenological research “seeks to understand a common experience in order to develop practices or policies or to develop a deeper understanding about the nature of the phenomenon” (Creswell, 2007, p. 60). Based upon the recommendations of Moustakas (1994) two broad questions were developed in order to focus attention on gathering data that will lead to a textural description and a structural description of the experiences and ultimately provide an understanding of the qualitative experiences of the participants:

What is your experience as a woman in the transportation industry?

What contexts or situations have influenced or affected your experience as a woman in the transportation industry?

Moustakas (1994) suggests that other questions may be asked but should be follow up to the initial broad questions. The following questions are based on a review of the literature on women in male dominated fields and factors that influence career entry, development and attrition and were the used for the interviews and focus groups:

What factors influenced your entry into the transportation industry?

Has mentorship been important in your career development?

What are your current career goals?

What barriers do you perceive to achieving goals?

Would you consider quitting your job?

Under what conditions? If no, what factors keep you in your position?

What is the role/status of women within your organization?

Do you know anyone who has experienced sexual harassment in the work place?

Was it reported? What was the response?

Have you had a “gap” in your employment history? If so, why did you leave and why did you return?

What were the five or fewer major events that helped your career?

What five or fewer hindered your career development?

In order to begin answering these important questions the authors interviewed women who are currently working in upper management positions at a variety of transportation companies across the country. Surveys and focus groups were also administered to women in other non-managerial level jobs at the same companies in order to get a wide perspective. The findings from these interviews, surveys, and focus groups will be discussed, as well as suggestions for recruiting and retaining more women in the transportation workforce.

### **Participants**

Participants were 26 female employees from 3 transit agencies in a major metropolitan area. Participants included 9 females in managerial positions, and 17 females in non-managerial positions. Managerial level women were interviewed individually, while non-managerial level women participated in focus groups. A focus group was conducted at each agency, and surveys were completed at that time. The focus groups consisted of 4, 5, and 8 participants.

### **Findings**

Preliminary findings suggest that women take entry-level positions due to wanting stable employment and have found this within the transportation industry. The majority of women in ts

study entered the transportation industry by default and reported that they had no intentions of making a career in the field. Both managerial and non-managerial level women reported finding barriers to promotion. Both groups reported that they found it helpful to have a mentor to guide them through the process of understanding what credentials they needed as well as how to apply for advancements. Discrepancies were found between entry-level positions and those women in management. It appeared that women in entry-level positions were less satisfied with their jobs than those in management positions. Further, it appeared that those in entry-level positions had more barriers to promotion than those women in management although barriers were reported at all levels.

### **Results**

Results of the analysis of survey and responses to focus groups with women in both management and hourly positions revealed that there were significant correlations between job satisfaction and a number of key variables. To the extent that women reported a good match between their values and skills (matching skills =  $r(24) = .548, p < .01$ ; matching values =  $r(24) = .646, p < .01$ ) and also perceived the possibility of career advancement (career advancement =  $r(24) = .552, p < .05$ ) and promotion (promotion =  $r(24) = .440, p < .05$ ) they also reported significantly higher levels of job satisfaction. In addition, high satisfaction with their overall career was most significantly correlated with the presence of a mentor (mentor presence =  $r(24) = .587, p < .01$ ). Finally, in terms of retention, the results clearly indicated that a high degree of belongingness (belongingness =  $r(24) = .811, p < .01$ ) was highly correlated with a desire to stay on in the same organization. Thus, from an overall perspective, retention is related to the quality and strength of the relationships in the workplace.

Women in Transportation Qualitative Data 2010

|  | <b>Focus<br/>Group 1</b> | <b>Focus<br/>Group 2</b> | <b>Focus<br/>Group 3</b> | <b>Totals</b> |
|--|--------------------------|--------------------------|--------------------------|---------------|
|--|--------------------------|--------------------------|--------------------------|---------------|



*Women in Transportation*

|   | January<br>28th | March 5 | April 22 |  |
|---|-----------------|---------|----------|--|
| <b>Sup Support</b>                                  | 11              | 3       | 5        | 19/28=68%<br>Felt supported by supervisor in career goals  |
| <b>Mentor</b>                                       | 8               | 2       | 3        | 13/28=46%<br>Had a mentor  |
| <b>Mentor important</b>                             | -               | 3       | 4        | 7/15=47% Thought their mentor was helpful/important  |
| <b>Fit Job</b>                                      | 12              | 7       | 6        | 25/28=90% Felt like their personality fit with their job   |
| <b>Fit Career</b>                                   | 12              | 3       | 6        | 23/28=82%  |
| <b>Fair Tx Coworkers</b>                            | 10              | 7       | 6        | 23/28=82% Felt they were treated fairly most of the time   |
| <b>Fair Tx Boss</b>                                 | 10              | 7       | 6        | 23/28=82%  |
| <b>Gap in employment history</b>                    | -               | 1       | 3        | 4/15=27%<br>Seems low, might indicate career not flexible to people who leave to care for children                                     |
| <b>Workplace harassment (do you 'know someone')</b> | -               | 6       | 5        | 11/15=73% said they knew someone who had been exposed to gender related (sexual or other) harassment. Seems to be an ongoing problem   |
| <b>Want to work in transportation?</b>              | -               | -       | 1        | 1/7=14% Only one person said they had wanted to work in the transportation industry prior to this job: maybe advertising is important? |
| <b>Total N</b>                                      | 13              | 8       | 7        | 28   |

Women who had an informal mentor (male or female) felt that they had been helped to be successful in their job by supporting them and telling them about promotions. Mentorship played an additional supportive role in encouraging younger females to apply for promotions as well as training programs that would lead to career advancement. Some women reported, “Had I not gotten into the apprenticeship program then I probably would have left”; “Once I was able to be part of the bigger picture that was very satisfying”. Perceived barriers to recruiting women into the organization may consist of women not wanting to do manual labor jobs, long hours and unpredictable work schedules, and that it is still seen as a “man’s world.” Insight into this

perception of a “man’s world” was made evident through several significant comments of female participants: “You have to become more of a man than they are, but you have to know when to turn it on and off”; “This is the boys club, I’m not held to the same standards”; “Don’t come in and say, ‘I don’t have somebody to watch the baby’. This isn’t the place for that”. Conversely, study participants reported the benefits of being in the transportation industry as good pay and benefits, the respect that is earned by knowing your job, job security, and opportunities for growth and advancement. “People stay here forever. We stay because the benefits are better than anywhere else”.

### **Discussion and Future Research**

Based on the results of this study, it seems evident that having a mentor is an important part of female workforce development within the transportation industry. The presence and influence of a mentor was strongly correlated with career satisfaction on the conducted survey and was talked about positively both in the managerial level individual interviews and non-managerial level focus groups. Formal mentorship for women and other minorities within the industry should therefore be explored further. Having a supportive relationship within the organization may help explain and therefore increase retention of women within transportation. Promotions and opportunities for training of women in order to promote career advancement also had a significant impact on job satisfaction and retention. It was clear that budget cuts in the recent years have led to less training opportunities, but they are missed by female workers. Most saw training as extremely helpful for moving up and learning new skills. It should be recognized that training was found to be more accessible for some over others because it is challenging to take classes with an unpredictable work schedule. Making training opportunities accessible and available to all female employees may increase satisfaction and retention.

Additionally, having a perception of one’s matching skills and values to that of the industry were positively correlated with job satisfaction, liking ones job, and career satisfaction. Perceived barriers for recruiting and retaining women in transportation included issues such as

women not wanting to do manual labor jobs, long hours and unpredictable work schedules, and that it is still seen as a “man’s world.” Perceived benefits of being in the transportation industry included good pay and benefits, respect is earned by knowing your job, job security, and opportunities for growth. Personality traits that are seen as being related to success in the transportation industry include being assertive, confident, reliable, ability to see the “big picture,” and having a “thick skin.” Short internships may be a good introduction to the transportation industry. Most of the women we interviewed got into transportation “by accident” and stayed because they saw the potential benefits. It may also help “weed out” people who quit shortly after being hired.

Some problems with recruitment and retention were seen more as a generational issue, rather than a gender issue. For example, younger people don’t want to work on the weekends and holidays and therefore do not stay in the position for very long. More research is needed to explore this issue and determine possible solutions, such as more information related to shift work at the time of hiring. A larger scale study is needed to test the generalizability of the findings in different parts of the country. Future studies will also seek to incorporate issues related to experiences of minority groups and differences between both private and public transportation sectors. Effectiveness of any existing policies related to recruitment and retention of women and minorities should be explored.

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**Verbatim Comments from Interviews**

- “Many times I am overlooked for various duties; I feel this is because of my gender. This makes me more determined to assert myself, sometimes coming close to anger/aggressiveness”
- The atmosphere is “a man’s world”
- I want to be recognized for my accomplishments when they are equal to my male coworkers
- I had to leave work when my children were young because of the schedule. I returned after they started school
- I have to fight the “We’ve always done it this way, why change” culture and the good old boys network
- You have some coworkers who don’t think you have any brains cause you’re a woman
- I wish they would make it more family oriented, possibly make your own hours to fit your family.
- I’m afraid I have lots of suggestions that would entail a lot of changes – but from past experiences I don’t share them
- All of the meetings are at night when I want to be with my kids
- I know more and do more and I trained my boss- I get paid 20k less

- I have been overlooked twice for my boss' job
- I'd quit if I'm not able to keep moving up, or if I am not challenged anymore